COUNTERFIRE

"A WAY"

AGENDA

- RADAR ZONES
- DEVELOPING A COUNTERFIRE EFAT
- COUNTERFIRE BATTLE DRILL
- WHAT MANEUVER NEEDS TO KNOW
- KEYS TO THE S2’s SUCCESS

RADAR ZONES

RADAR ZONES

There are four types :

- Critical friendly zone (CFZ)
- Call for fire zone (CFFZ)
- Artillery target intelligence zone (ATIZ)
- Censor zone (CZ)

RADAR QUEUE PRIORITIZATION

- **Radar sorts target acquisitions in its target queue in priority of which zones the target violated:**
  - 1. CFZ
  - 2. CFFZ
  - 3. ATIZ
  - 4. NO ZONE

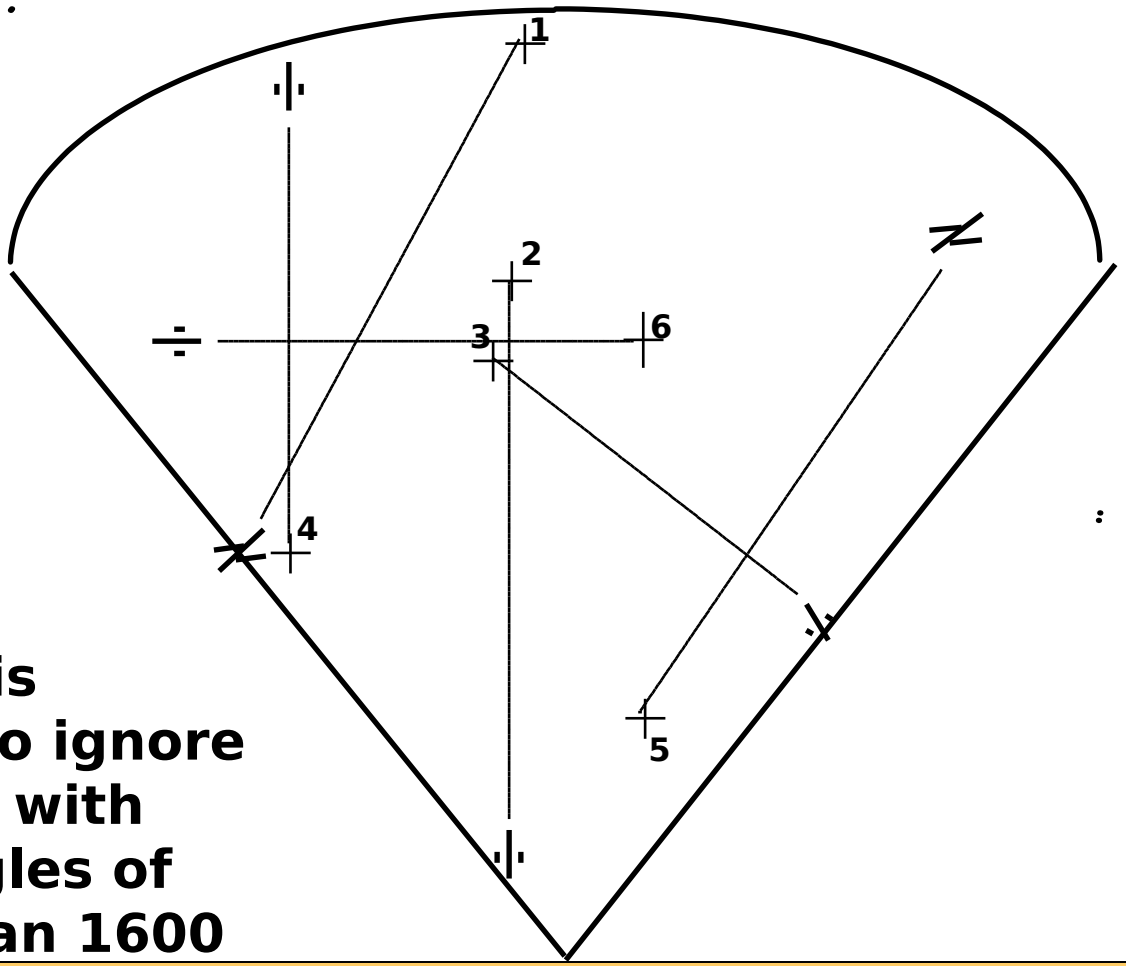
RADAR ZONE RULES

- **Up to nine zone can be entered into the radar. Zones can be of one type or any combination of zones.**
- **A zone is defined by a minimum of 3 grids, a maximum of 6 grids.**
- **Radar zones cannot intersect or touch each other**
- **No more than two zones can lie along the same search azimuth.**
- **Grid coordinates must be entered sequentially (Clockwise or counter-clockwise)**
- **All zones, except CFZs, must fall within the radar search sector.**
- **An azimuth cannot intersect the boundary of a zone more than two times.**

TRACKING CAPABILITIES & LIMITATIONS

ASPECT ANGLE

Aspect Angle: The angle between the radar antenna and the target path of the object



Detected?

1 - No

2 - No

3 - No

4 - Yes

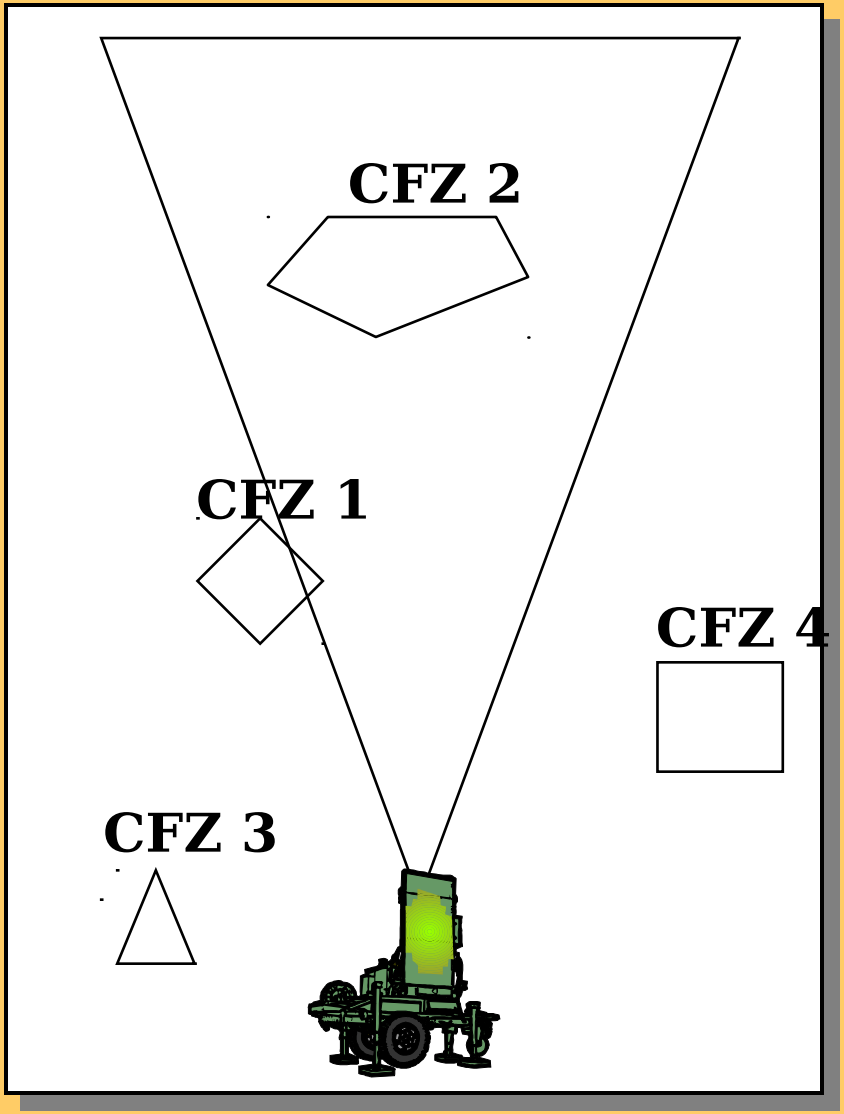
5 - Yes

6 - 50/50

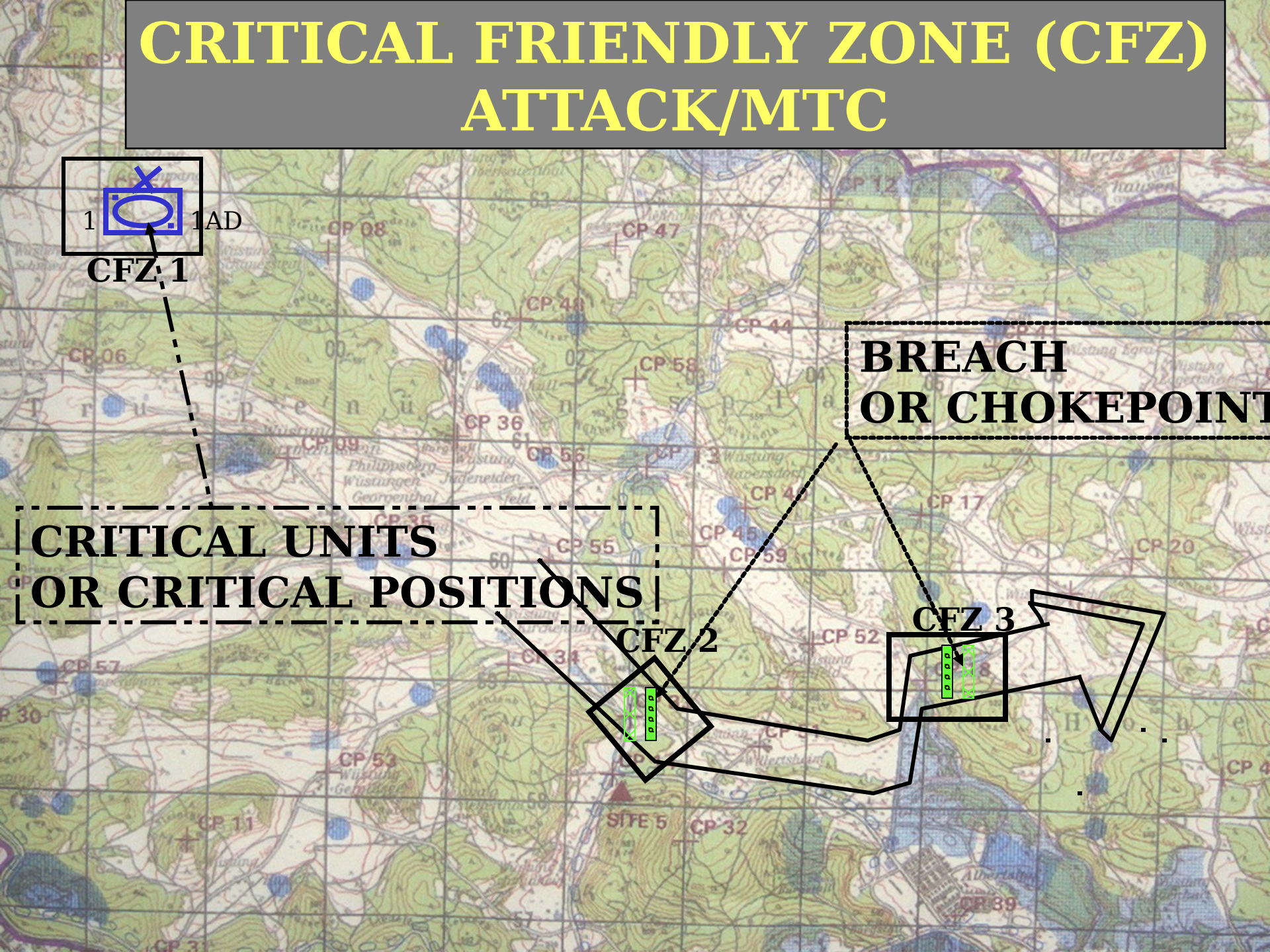
The radar is <u>designed</u> to ignore detections with aspect angles of greater than 1600 mils (its not

CRITICAL FRIENDLY ZONE (CFZ)

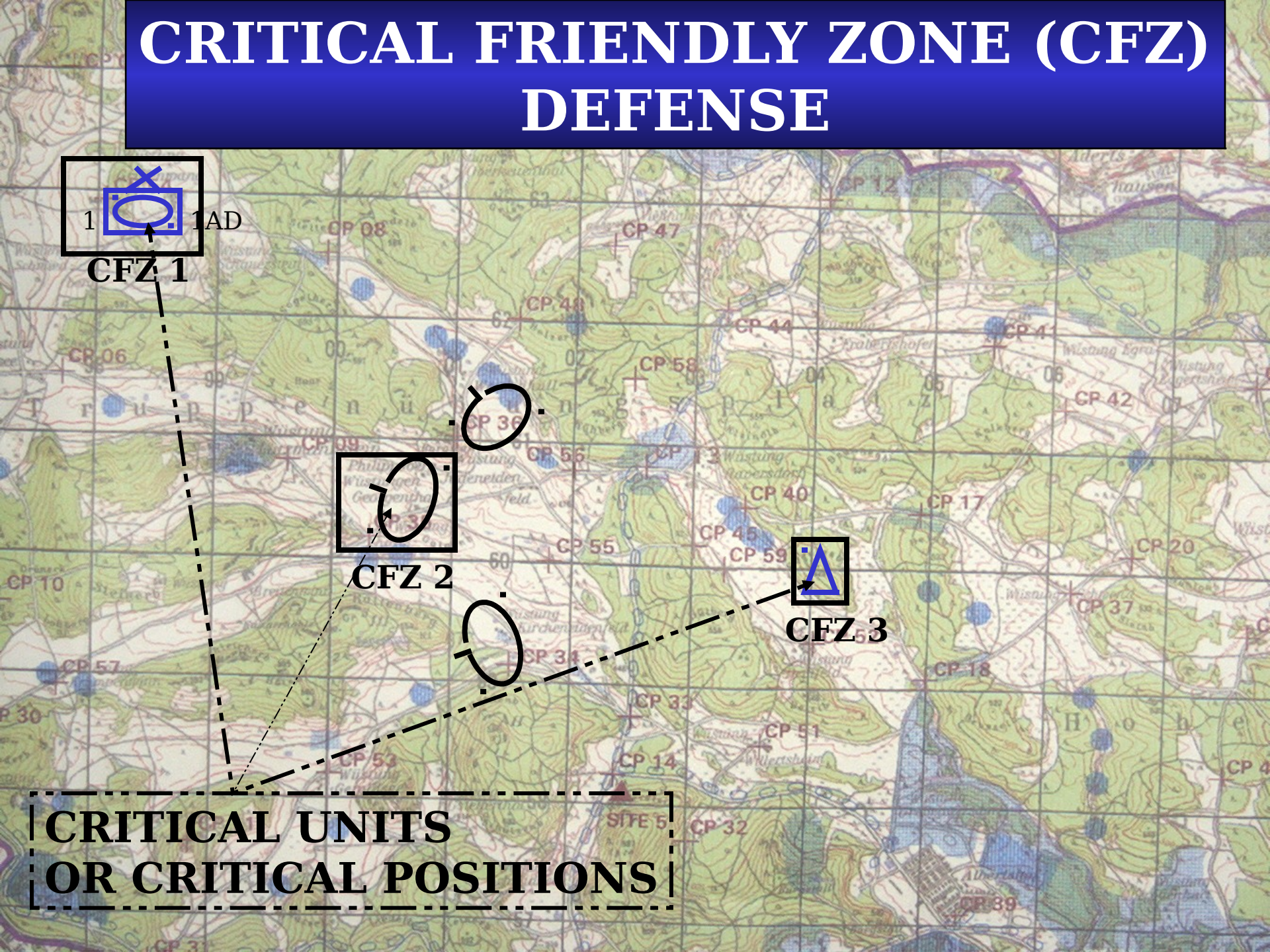
- **A friendly unit or location which the Maneuver Commander designates as critical to achieving the mission.**
- **A round impacting in this zone will result in a FM:CFF, priority one, being sent to the FDC.**
- **<u>Only point of origin is contained in the FM:CFF</u>**
- **Zone can be located outside the radar's search sector.**
- **NOT A FORCE FIELD**



CRITICAL FRIENDLY ZONE (CFZ) ATTACK/MTC

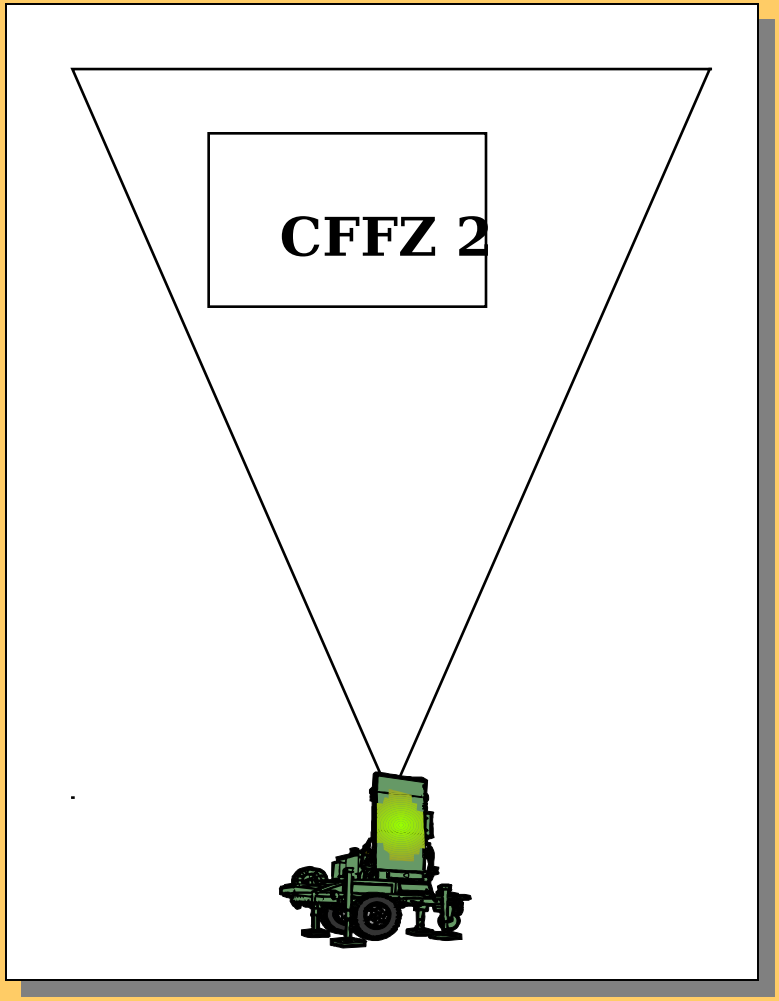


CRITICAL FRIENDLY ZONE (CFZ) DEFENSE



CALL FOR FIRE ZONE (CFFZ)

- **An area considered a priority to identify/engage enemy indirect firing systems effects that are engaging friendly forces or affecting the area of operation.**
- **A weapon located in this zone will result in a FM:CFF, priority two, being sent to the FDC.**
- **<u>Only point of origin is contained in the FM:CFF</u>**
- **Zone must be located inside the radar's search sector**
- **Best when used to attack specific units OR specific weapon types.**

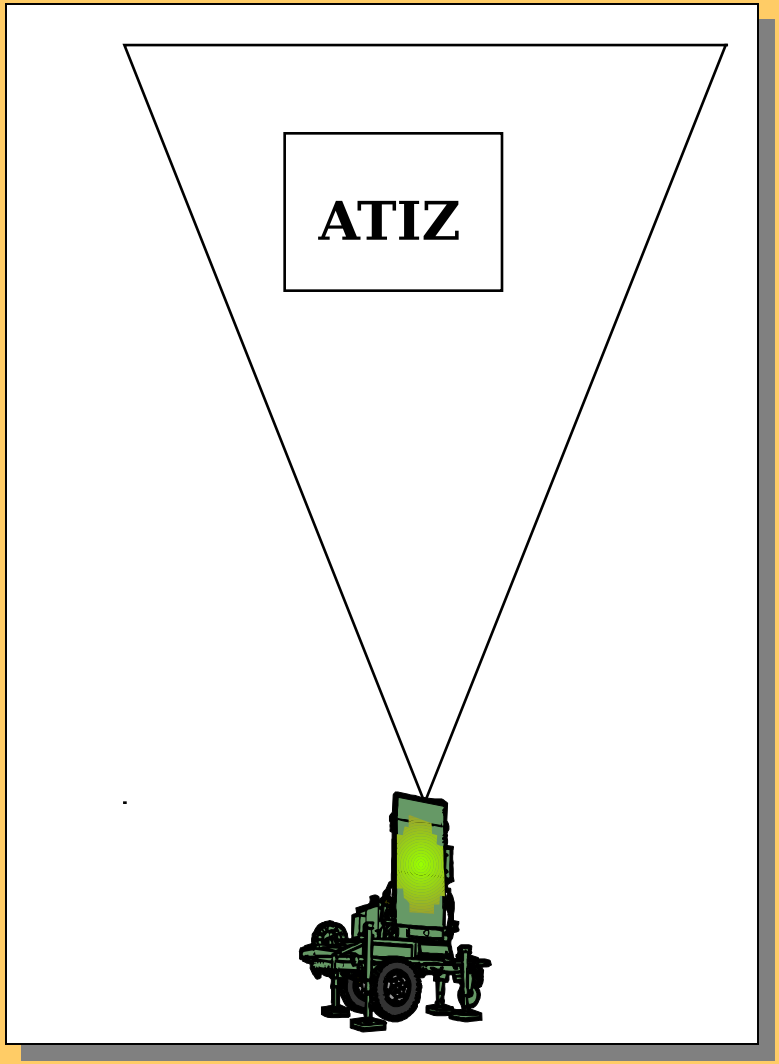


ARTILLERY TARGET INTELLIGENCE ZONE (ATIZ)

- **An area the Maneuver Commander wishes to closely monitor.**
- **May be used to Prioritize Acquisitions that are not Priority 1 or 2 CFFs. May be used to develop next CFFZ.**

A weapon located in this zone will result in an ATI:CDR being sent to the FDC.

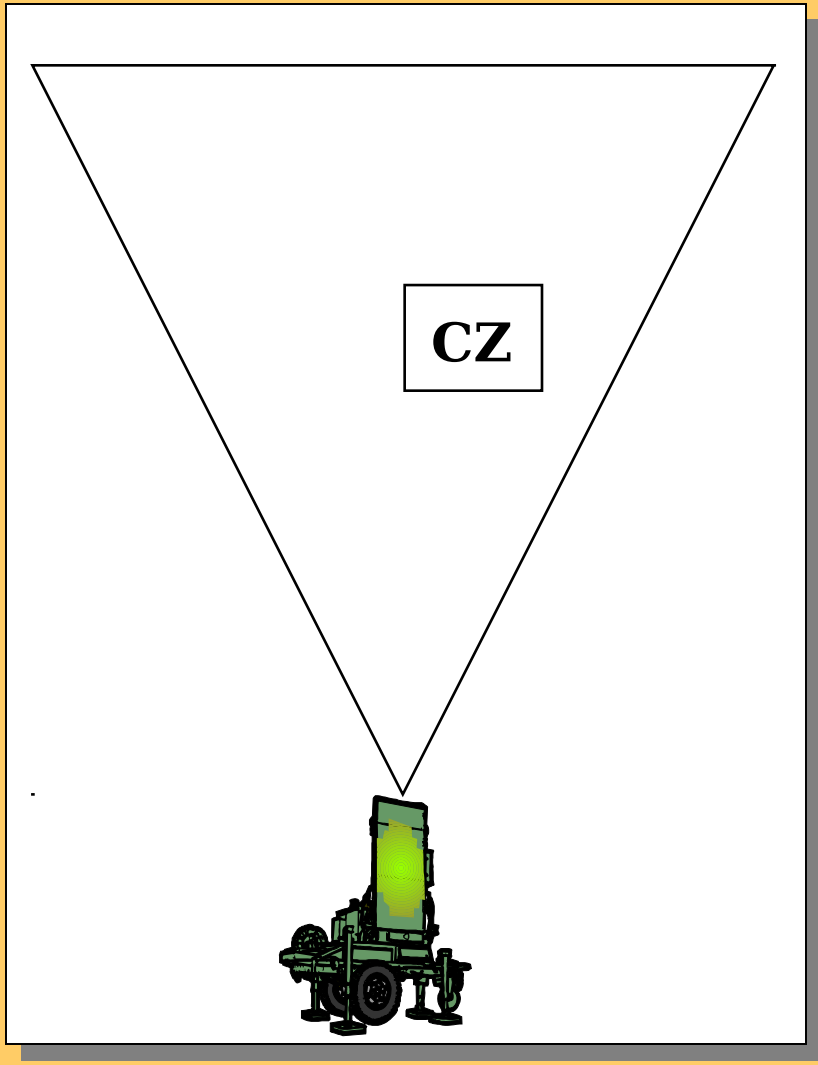
- **<u>Point of origin, point of impact, and suspected weapon type is contained in the ATI:CDR</u>**
- **Zone must be located inside the radar's search sector**



CALL FOR FIRE ZONE (CFFZ) ATIZ

CENSOR ZONE (CZ)

- **An area from which you wish to ignore all target detections.**
- ***<u>Weapons that fire from this zone are not processed by the radar.</u>***
- **Zone must be located inside the radar's search sector.**
- **May be used as a Protective Measure for friendly indirect fire systems when FLOT is not Linear.**



ZONE MANAGEMENT

MUST BE REVISED

- **Who is the zone manager? Who decides what zones go where? Who decides how many of what type of zones to use? Who tracks the zones?**
  - **TTP: BDE FSO = CFZs, Counterfire HQ/ S2 = CFFZ, CZ, & ATIZ**
- **Zone manager directs radar tech which zones to delete and which zones to add or change.**
- **If a 10th zone is entered into the radar the 1st zone is automatically rejected.**
  - **TTP: Delete old zone before entering a new zone.**
- **Zones and search sectors can be digitally submitted to the radar using SPRT:SEARCH and SPRT:FILTER messages.**
- **If changing zones via digital traffic always confirm via voice.**
- **Radar Deployment Order is used to establish zones.**
- **Consider using a zone execution matrix rather than RDO to execute zones.**

DEVELOPING THE COUNTERFIRE EFAT "A WAY"

WHAT DO I HAVE TO DO?

MISSION: DEFEND

BRIGADE COMMANDER:

1. **"PREVENT HIS ARTILLERY FROM TAKING DOWN MY COMBAT POWER"**

2. **"TAKE DOWN THE FSE, AGMB, AND HURT HIS MRBs"**

ARTILLERY TRANSLATION:

TASK

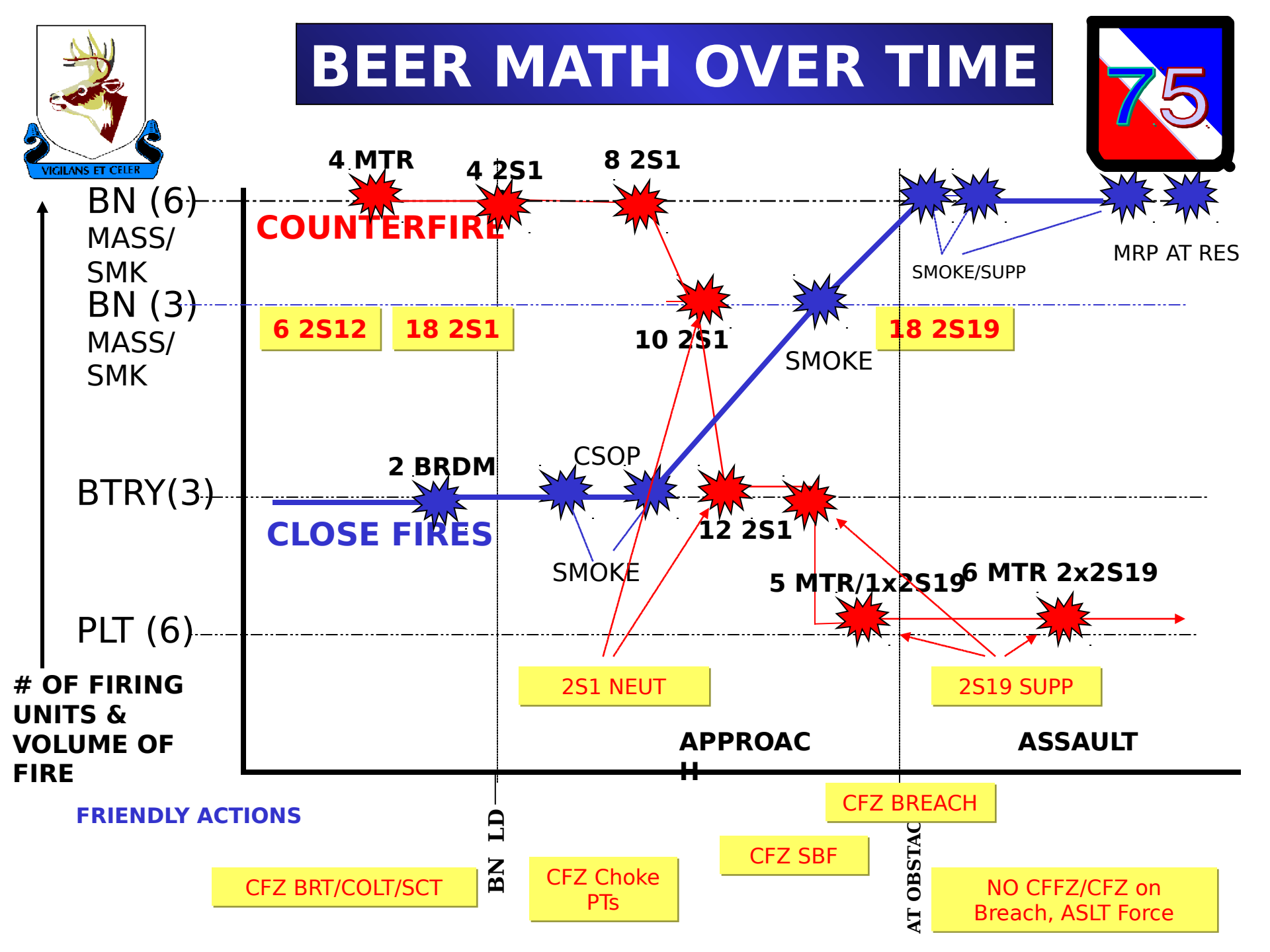
ENDSTATE

1. **NEUTRALIZE THE RAG EFFECTS = 18x2S19, 12x2S1**
2. **NEUTRALIZE THE FSE EFFECTS = 2 BMPs**
3. **NEUTRALIZE THE AGMB EFFECTS = 8**

HOW DO I DO ALL OF THAT, AND WHEN?

BEER MATH!

BEER MATH OVER TIME



COUNTERFIRE EFAT

BEER MATH

ENDSTATE: DESTROY 18 x 2S19 HOWITZERS

(ASSUMING AN EFFECTIVE COUNTERFIRE DRILL)

METHOD	EFFECTS	# OF MISSIONS REQUIRED	# OF ROUNDS REQUIRED
BN 6 HEF	4 X TUBES	4 1/2 MISSIONS	486 HEF
BN 3 HEF	2 X TUBES	9 MISSIONS	486 HEF
BN 1 HEF	1 X TUBES	18 MISSIONS	324 HEF
BTRY 3 HEF	1 X TUBES	18 MISSIONS	324 HEF
PLT 6 HEF	1 X TUBES	18 MISSIONS	324 HEF

QUESTION: IF WE DON'T EXPEND AMMO EARLY WILL WE WIN THE

COUNTERFIRE EFAT

"A WAY"

PHASE I: COUNTER RECON BATTLE

TASK: DESTROY 2S19 BATTALION

PURPOSE: Disrupt the RAG in order to preserve Brigade combat power and defeat the Regimental Recon.

METHOD: Q36 INITIAL POSITION PZ 12 AOS2000, COMMAND CUE, NLT 12200O CUE RED. 130200 AMBER

- CFFZ 1 IN EFFECT NLT 122000, CFFZ 2 IN EFFECT NLT 122000,

CONTINUED

- CFZ 1, CFZ 2, CFZ 3, I/E NLT 122000; O/O

COUNTERFIRE EFAT

- BN 6 HEF LOT Z CHG 7 Initial Zone Violations, 5th Zone Violation BN 3 HEF LOT Z CHG 7
- COORDINATE W/ DIVARTY to Establish CSB at TQ 83 Easting to attrit elements of the RAG in our Zone.
- A Btry occupy PZ 10 O/O Displace to PZ 7
- B Btry occupy PZ 16 O/O Displace to PZ 12
- C Btry occupy PZ 15 O/O Displace to PZ 14
- Bn TOC displaces to subsequent PZ upon completion of endstate.
- Batteries rehearse displacements and report movement time to Bn TOC NLT 121800 Nov
- Combat Trains position vic CP 50 (1 x DPICM-ER RB and 1 x DPICM WB CCL per Btry NLT 121800 Nov)

SURVIVABILITY CRITERIA 2/15/15

COUNTERFIRE EFAT

"A WAY"

PHASE II: DEFEND IN SECTOR

TASK: SUPPRESS 2S1 BNS

PURPOSE: DISRUPT RAG ABILITY TO SUPPORT MRR APPROACH MARCH AND ATTACK.

METHOD: -Q36 Positioned PZ 12 AOS 2000, CUE AMBER

- CFFZ 3 In Effect upon identification of CRP

- CFZ 4, 5, 6, Active upon identification of FSE, inactivate CFFZs

- Bn 3 HEM LOT Z 7 RB on Zone Violations until Identification of FSE or BN size elements across

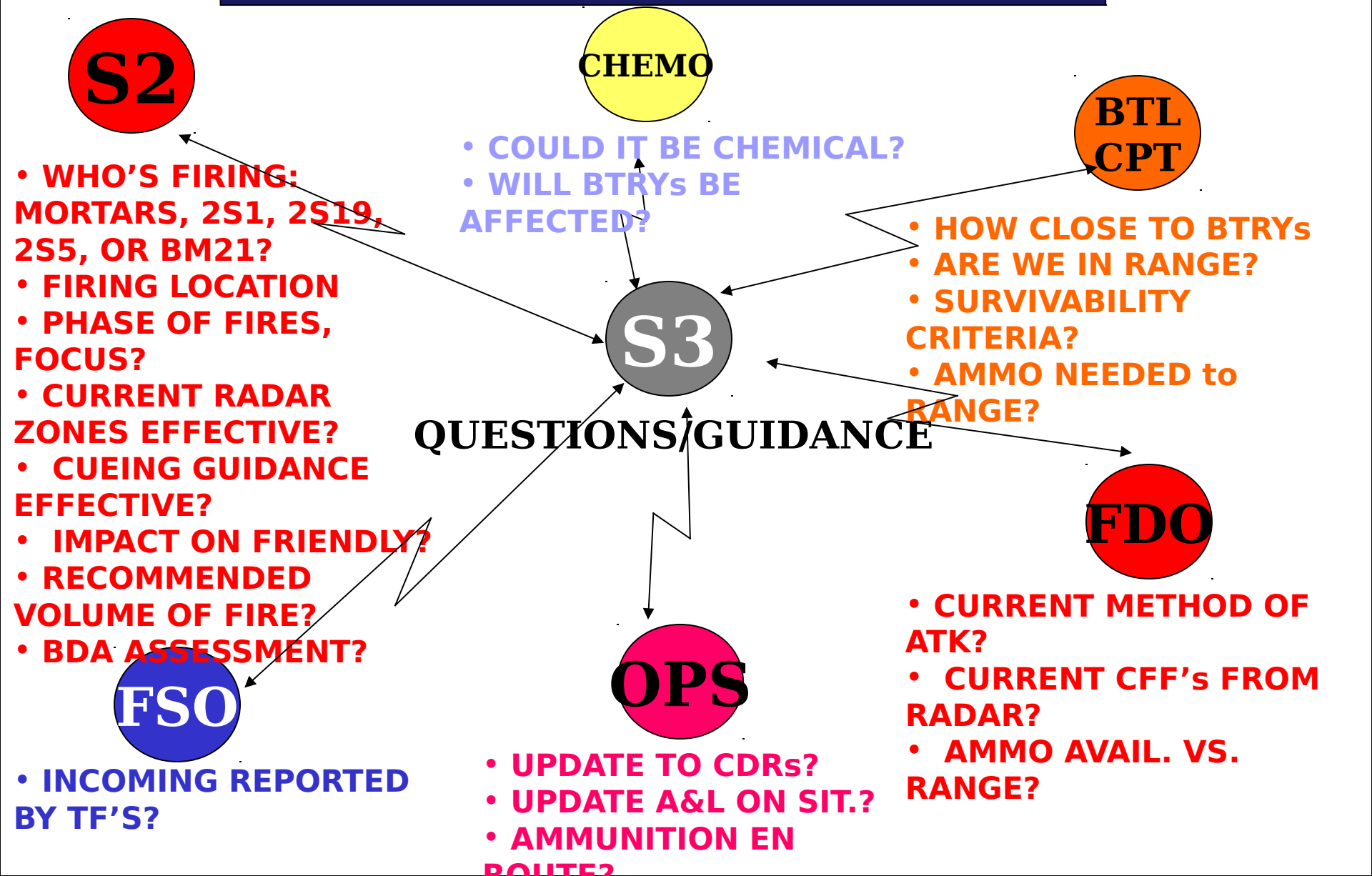
CONTINUED

COUNTERFIRE EFAT

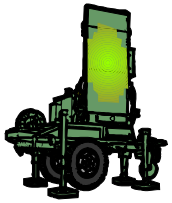
- Upon Identification of FSE or Bn size elements across PL Princess C Btry becomes Counter Battery Shooter Btry 3 HEF per CFZ violation, CFF: X to DIVARTY.
- A BTRY: PZ 7
- B BTRY: PZ 12
- C BTRY: PZ 14
- REQUEST 1AD DIVARTY establish CSB at QV 15 Easting to Destroy 12 x 2S19 Tubes if two 2S19 Bns assessed in RAG

ENDSTATE/EFFECTS: 9 x 2S1 TUBES DESTROYED, 12x2S19 TUBES DESTROYED.

BATTLE COMMAND
COUNTERFIRE



BATTLE DRILL
COUNTERFIRE
"A WAY"



DIGITAL RADIO

DIGITAL

RADIO

1 FM;CFF PRI 1 OR 2 *AUTO FWD*

DIGITAL WIRE

O/I

FDC

S3

2 FM;CFF FROM ATI CDR

ATI;CDR FM;CFF

S2

TGT # , WHEN, & HOW ATTACKED

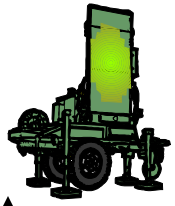
FDO

- **HAVE WE MET EFA**
- **QUESTIONS**
- **GUIDANCE**

- MAP DRILL, TARGET FILES
- WEAPON SYSTEM?
- ADJUST ZONES?
- IMPACT ON FRIENDLY?
- RECOMMEND TGTS FOR ATTACK
- SEND FM; CFF TO FDC
- RECORD PREDICTIVE BDA

- PRIORITIZE FOR ATK
- ISSUE FIRE ORDER IAW EFAT METHOD.
- MONITOR EFAT STATUS W/ BTL CPT/S3
- PASS INFO TO S2 FOR PRED BDA
- KEEP S3 INFORMED ON

BATTLE DRILL
LIC/PSO
"A WAY"



DIGITAL RADIO

① ATI;CDR

AUTO FWD

DIGITAL WIRE

BDE FSE

② ATI CDR

ATI;CDR

BATTLE STAFF

QRF CA TEAM CI TEAM PYSOPS

- **HAVE WE MET EFA**
- **QUESTIONS**
- **GUIDANCE**

- MAP DRILL, TARGET FILES
- WEAPON SYSTEM?
- ADJUST ZONES?
- IMPACT ON FRIENDLY?
- RECOMMEND TGTS FOR ATTACK
- SEND FM; CFF TO FDC
- RECORD PREDICTIVE BDA

- PRIORITIZE FOR ATK
- ISSUE FIRE ORDER IAW EFAT METHOD.
- MONITOR EFAT STATUS W/ BTL CPT/S3
- PASS INFO TO S2 FOR PRED BDA
- KEEP S3 INFORMED ON